

REMARKS

The Examiner's indication of allowable subject matter of claims 5, 8, 13, 17-20 is noted with appreciation.

Claims 1-21 are pending in the instant application. Allowable claims 5, 8, 13, and 17 have been rewritten in independent form. Claims 1 and 9 have been amended to define over the prior art. The remaining claims have been amended to improve claim language. Claim 21 has been added to provide Applicants with the scope of protection to which they are believed entitled. The specification and Abstract have been amended to be compliant with commonly accepted US patent practice and to remove apparent errors. No new matter has been introduced through the foregoing amendments.

The 35 U.S.C. 102(b) rejection of claims 9-12, 14, and 16 as being anticipated by *Hammond* (U.S. Patent No. 5,219,690) is noted. Independent claim 9 has been amended to overcome this rejection.

In particular, amended claim 9 now requires that the discharge outlet be located **outside** the inner passage for the coating liquid. In *Hammond*, all discharge outlets 32A-C are located within the bell 324 (FIG. 2B) and therefore, within the internal passage for the coating liquids. Amended claim 9 is not anticipated by *Hammond*. The applied reference is not modifiable to arrive at the invention of amended claim 9, at least for lack of an adequate suggestion or motivation to do so. Claim 9 is thus patentable over the applied art of record.

Claims 10-12 and 14-16 depend from claim 9, and are considered patentable at least for the reason advanced with respect to amended claim 9. Claims 10-12 and 14-16 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

For example, as to claim 11, the art fails to disclose, teach or suggest that the discharge outlet is located **in a vicinity of said front end** so as to feed the accessory liquid into the spray jet at the front end of the liquid atomizer. In *Hammond*, all discharge outlets are not located in a vicinity of the front end (near reference numeral 324 in FIG. 2B).

As to claims 12 and 14, the art fails to disclose, teach or suggest that the accessory-liquid feed unit includes one or more said discharge outlets positioned **radially outwardly from the external surface** of the front end and circumferentially thereof to feed the accessory liquid at several locations around the spray jet into this jet. In *Hammond*, all discharge outlets 32A-C are located radially inwardly from the external surface of bell 324.

As to claim 15, the art fails to disclose, teach or suggest that the accessory-liquid feed unit is configured to **drip** the accessory liquid onto **the external surface** of the front end of the rotary atomizing element. The Examiner's argument in paragraph 4 of the Office Action is noted, but respectfully traversed, because the Examiner failed to demonstrate where the suggestion or motivation to modify *Hammond* might be found, i.e., in the applied/cited references themselves or in the knowledge generally available in the art. If the latter, Applicants respectfully request that convincing evidence (e.g., citation of column and line numbers of supporting references) be provided to show that it was known in the spray coating art, prior to the present invention, to **drip** accessory liquid in the presently claimed manner.

The 35 U.S.C. 103(a) rejection of claims 1-4, 6 and 7 is noted. Although Applicants do not agree with the Examiner's position, amendments have nevertheless been made to independent claim 1 to clearly define the rejected claims from the applied reference.

In particular, amended claim 1 now requires that the accessory liquid be metered into said spray jet **at a location outside said liquid atomizer**. In *Hammond*, all discharge outlets 32A-C are located within the liquid atomizer, i.e., bell 324 (FIG. 2B), and, thus, any "accessory liquid" would

be metered at a location inside the bell. Claim 1 is thus patentable over the *Hammond*.

Claims 2-4, 6-7 and 21 depend from claim 1, and are considered patentable at least for the reason advanced with respect to amended claim 1. Claims 2-4, 6-7 and 21 are also patentable on their own merits since these claims recite other features of the invention neither disclosed, taught nor suggested by the applied art.

For example, as to claim 3, the art fails to disclose, teach or suggest the claimed depositing said accessory liquid into said spray jet **at said front end or at a location in a downstream vicinity thereof**. In *Hammond*, any "accessory liquid" would be deposited, at best, in a location upstream of the front end of bell 324.

As to claim 4, the art fails to disclose, teach or suggest the claimed depositing the accessory liquid into the spray jet **at a number of locations outside the liquid atomizer**, said locations being distributed circumferentially over at least a portion of said spray jet.

As to claim 6, the art fails to disclose, teach or suggest the claimed nozzle aperture which is configured **at a front end segment** of the spray system.

As to claim 7, the art fails to disclose, teach or suggest the claimed **dripping** the accessory liquid **onto the external surface** of the atomizing element.

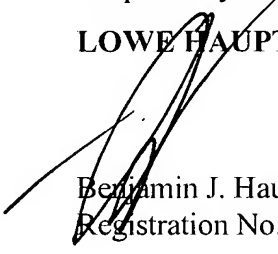
Each of the Examiner's rejections has been overcome. Accordingly, Applicants respectfully submit that all claims are now in condition for allowance. Early and favorable indication of allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

**LOWE HAUPTMAN GILMAN & BERNER, LLP**



Benjamin J. Hauptman  
Registration No. 29,310

*USPTO Customer No. 22429*  
1700 Diagonal Road, Suite 310  
Alexandria, VA 22314  
(703) 684-1111 BJH/KL/klb  
(703) 518-5499 Facsimile  
Date: **February 17, 2004**